State of California

Department of Food and Agriculture Division of Measurement Standards

Certificate Number: 5283-01

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California Type Evaluation Program Certificate of Approval for Weighing Devices

For:

Hopper Scale Weighing Element

Load Cell Electronic Model: QSTNK Series*

 n_{max} : 7500 e_{min} : 2 lb Capacity: 7500 lb to 20 000 lb

Dimensions: Height 4' to 10'/Diameter 3' to 6.6'

Accuracy Class: III

Submitted by:

Quality Scale

4435 North First St., Suite 103

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Standard Features and Options

* The series consist of the following capacities: 7500 lb, 10 000 lb, 12 500 lb, 15 000 lb, and 20 000 lb

Cylindrical hopper scale mounted in a four load cell configuration with steel support structure

Hopper construction material: Mild steel

Load cells used: (4) Rice Lake Weighing Systems Model RL7000B-5 double ended shear beam (Certificate of

Approval Number 3892-93) capacity 5000 lb or metrological equivalent

Indicator: Rice Lake Weighing Systems Model IQ 800-3A (Certificate of Approval Number 3744(b)-97) or an

approved and compatible indicator

Temperature Range: -10 °C to 40 °C (14 °F to 104 °F)

These devices were evaluated under the California Type Evaluation Program (CTEP) and were found to comply with the applicable requirements of California Code of Regulations for "Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Effective Date: September 27, 2001

Mike Cleary, Director

Certificate Number: 5283-01

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Quality Scale Hopper Scale Weighing Element Model: QSTNK Series

<u>Application:</u> To be used as a construction material hopper scale when attached to an approved and compatible indicating element.

<u>Identification:</u> A metal identification badge is riveted to the junction box located on the side of the hopper scale.

Sealing: The load cell junction box can be sealed by placing a wire security seal through two drilled head screws securing the cover. Additionally, the overall calibration can be sealed at the indicator in accordance with the sealing described for the compatible, approved indicator.

<u>Test Conditions:</u> The emphasis of the evaluation was on the design, marking requirements, and performance of the load/weighing element. A Model QSTNK-15K, 15 000 lb x 2 lb hopper scale, with a hopper 8' high and 6' diameter was interfaced with a Rice Lake Weighing Systems Model IQ 800-3A (Certificate of Approval Number 3744(b)-97) indicator for the purpose of this evaluation. Several increasing/decreasing load tests were performed using 15 000 lb of certified test weights. The system also complied with discrimination and return to zero requirements. The scale was used for more than 40 days and was retested in the same manner.

Results of the evaluation indicate the devices comply with applicable requirements.

Type Evaluation Criteria Used: Title 4, California Code of Regulations, 2001 Edition

Tested By: Dan Parks (CA) and Ken Jones (CA)